May - Lesson Plan Grades K-I

VARY YOUR VEGGIES



Begin each nutrition education lesson with a short physical activity break from the card set provided by IDPH. Have fun and get active with your students!

Objectives

Learn why it is good to eat asparagus and spinach.

Learn that people eat plant stems and leaves.

Explore the taste and appearance of spinach and asparagus.

Supplies Needed

May Pick a **better** snack™ & **Act** bingo card

Spinach and asparagus for tasting. Low-fat dressing is optional.

Ruler

Tasting Opportunities

Featured Vegetables: Spinach Asparagus

Background

Vitamin A is important for our eyes, healthy skin, and growth. Vitamin C helps wounds to heal and the body to withstand injury. Both vitamins help fight infection in our bodies. Infections make us feel sick, like when we have the flu.

Vitamins A and C also help protect our bodies against diseases. They do this partly by keeping our immune system strong. Our immune system tries to keep us from getting sick, and when we do get sick, we rely on the immune system to make us well again. So eating food rich in vitamins A and C is important for our health.

Asparagus is believed to have originated in Greece 2,500 years ago. Royalty had servants whose entire job was to hand-pick the best stalks of asparagus. King Louis XIV even had asparagus grown in greenhouses, so it was available to him all year.

Asparagus also had medicinal purposes in ancient times. It was not uncommon to have teas made to comfort common ailments.

Asparagus is thought to have been brought to the United States by English or Dutch immigrants. Asparagus can be grown in Iowa.

Asparagus is a perennial plant that is a member of the lily family. The plant can grow 15 years or more and can be harvested after three years. We eat the stem of the plant, called "spears." The name asparagus is a Greek word meaning "shoot" or "sprout." An asparagus spear can grow ten inches in a 24-hour period! After two to three months of harvesting, the asparagus plant looks like a fern. Then the plant goes into a dormant stage.

Asparagus is available in green, purple and white varieties. The white variety is most common in Europe. It is white because it is grown under sandy soil and does not receive

sunlight to undergo photosynthesis.

Asparagus can be eaten fresh or cooked. It has a lot of nutrients including folic acid, potassium, fiber, vitamin B6, vitamin A and vitamin C.

Spinach is thought to have originated in modern-day Iran in the 11th century. The Chinese called it the "Herb of Persia."

Spinach is a low-growing annual that must be replanted each year. Spinach can be grown in Iowa. We eat the leaves of the spinach plant.

We eat spinach fresh or cooked. Spinach is rich in vitamins A and C and fiber.

Web Site Resources

www.idph.state.ia.us/pickabettersnack www.fruitsandveggiesmorematters.org www.choosemyplate.gov www.fns.usda.gov/eatsmartplayhard

Do the Activity: Kindergarten and Ist Grade

Share appropriate information from the background on asparagus and spinach. Plants have different parts just like we have different body parts. One part is the stem or stalk and another part is the leaf. When we eat asparagus we are eating a stalk. When we eat spinach we are eating a leaf. Both can be grown in Iowa. Ask if anyone has ever picked spinach or asparagus from an Iowa garden.

Pass around washed, large spinach leaves and have them examine the leaf. Does it feel like other leaves they have seen? How does it compare to lettuce (in the lettuce salad) that is also on the bingo card for May?

Kindergarten

Pass around a few asparagus stalks for students to touch. If the store has different sizes of asparagus pick a few large stalks to compare to the smaller. Slender stalks should be used for tasting. Review the other foods on the bingo card. Which ones would be considered a plant stalk? (Asparagus, celery and rhubarb.)

Ist Grade

Have you seen asparagus growing? What does it look like? (It looks like long stalks poking straight out of the ground. If you cut them off when they are about 10 inches, they are just right for eating. If you let them keep growing, the tops turn into a fern-like bush.) Use a ruler to measure the length of a few





stalks. How do asparagus stalks compare in length to celery and rhubarb?

Talk It Over: Kindergarten

What vegetables are on the May bingo card? (spinach, asparagus, rhubarb, celery, lettuce (in lettuce salad), and frozen vegetables)

What color are spinach, asparagus and lettuce? (green; asparagus can also be white or purple)

What other green vegetables do you like to eat? (green peppers, green beans, broccoli, green cabbage, celery, cucumber, artichokes)

Ist Grade

How are plant stems or stalks different from plant leaves? When they eat a stalk, how does it feel in their mouth? What happens to celery and asparagus when it is cooked?

What does spinach look like when it is growing? (Like dark green lettuce leaves growing close to the ground.)

Apply:

What do asparagus and spinach have in common? (They can be eaten raw or cooked. They are green vegetables. They are high in vitamins A and C. They like to grow in cooler spring weather, like what we have in lowa during May.)

How many of you have eaten asparagus? Spinach?

What is your favorite way to eat spinach? (in a salad, in a casserole, cooked with vinegar on top)
What is your favorite way to eat asparagus? (in soup, in a casserole, steamed with margarine and salt on top)

Did you know MyPlate says to "Eat more dark green veggies like broccoli, spinach, and other dark leafy greens?" Did you eat a dark green vegetable today? Yesterday?



Tasting Opportunity

Have the students wash their hands. Wash small spinach leaves and drain.

Wash the asparagus. If the asparagus is not tender it may be best to place in microwave for just a few minutes to soften. Cut into bite size pieces.

Both can be sampled plain and then dipped in a low-fat salad dressing.





Tasting option: Spinach Salad in the Bag (from Captain 5 A Day)

Instructions

Give each child:

- A plastic bag
- 2 to 4 spinach leaves (thoroughly washed)
- 1 tsp. low-fat salad dressing
- A fork

Ask each child to:

- Tear the spinach leaves into bite size pieces.
- Put the spinach pieces into the baggy.
- Add other bite-sized pieces of fruits and vegetables, if desired. (Asparagus would be fine.)
- · Add the salad dressing.
- Zip the bag closed.
- Shake the bag until dressing covers leaves.
- Open the bag and eat spinach salad with a fork.

Students can put an "X" through the bingo square of the vegetable(s) that they sampled.

How would you prepare spinach for a snack?

– Wash. Eat. (How easy is that?)

How would you prepare asparagus for a snack?

– Wash. Cut. Eat. (How easy is that?)

The back of the Pick a **better** snack[™] & **Act** bingo card for May has information for their parents and grandparents. Ask students to bring home their bingo card and choose a snack and physical activity to try with their family.



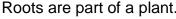


Extend the Activity

Write the words to "Plants" on sentence strips and put the sentence strips in a pocket chart on a stand. As a shared reading first, and then in an independent learning center, sing the song to the tune of "The Wheels on the Bus."

Plants

The roots on a plant grow underground, Underground, underground. The roots on a plant grow underground. Roots are part of a plant.





Art, Music

The stems on a plant hold up the leaves, Up the leaves, up the leaves. The stems on a plant hold up the leaves. Stems are part of a plant.

The leaves on a plant are making food, Making food, making food. The leaves on a plant are making food. Leaves are part of a plant.

The flowers on a plant are growing seeds, Growing seeds, growing seeds. The flowers on a plant are growing seeds. Flowers are part of a plant.

Read D.W. the Picky Eater by Marc Brown, Little, Brown and Co., 1995. D.W. has a long list of foods she won't eat. When the family eats out for Grandma Thora's birthday, D. W. decides to change her ways.



Language Arts & Reading

Other selections:

A Gardener's Alphabet by Mary Azarian, 2000 Beatrice Potter books such as the Tale of Peter Rabbit. We Can Eat the Plants by Rozanne Lanczak Williams, Creative Teaching Press, Inc., 1994.

Enjoy reading aloud <u>The Gigantic Turnip</u> by Aleksei Tolstoy and Niamh Sharkey, Barefoot Books, 1998. In this traditional Russian folktale, an old man and woman get lots of help to pull out the gigantic turnip in their garden.

Use Inchworm and a Half by Elinor Pinczes, Houghton Mifflin Company, 2001, to help students understand fractions and measurement as worms nibble and munch their way around



Math







Science & Health

Place asparagus and spinach in a learning center with name labels for the students to explore with their five senses (except hearing and tasting).

the delicious vegetables in the garden.



Social Studies

Ask "Where do asparagus and spinach grow?" (*Iowa*) "What state grows the most spinach? (*California*) Find Iowa and California on a United States map or puzzle. If spinach is transported in a truck from California to Iowa it would need to cross several states before it arrived. Explore possible routes.

Does your community have a local farmers' market? If yes, ask if the children have visited the market and what they found there. Remind them to look for vegetables.

